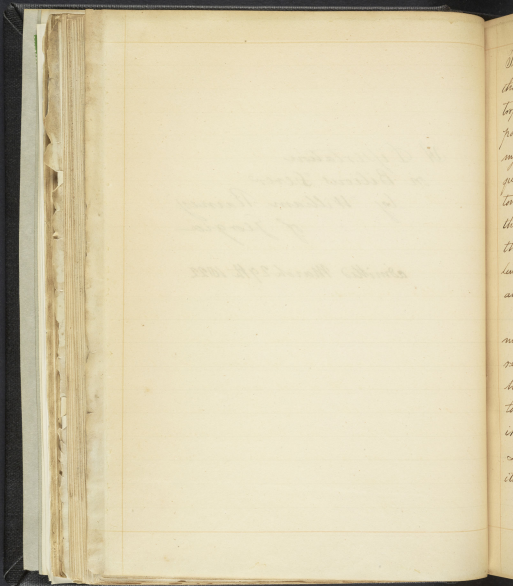


A Dissertation
on Bilious Fever
by William Rainey
of Georgia

admitted March 29th 1822



There is no organ, if we except the stomach, that is so generally interested in the diseases of tropical climates, as the Liver. Such is the importance of its secretion in the digestive economy, that a derangement of its functions frequently gives rise to the most alarming symptoms. It is from an idea of the influence of the Liver over the system, probably, through the medium of the stomach, that certain violent fevers attended by hepatic derangement, are called bilious.

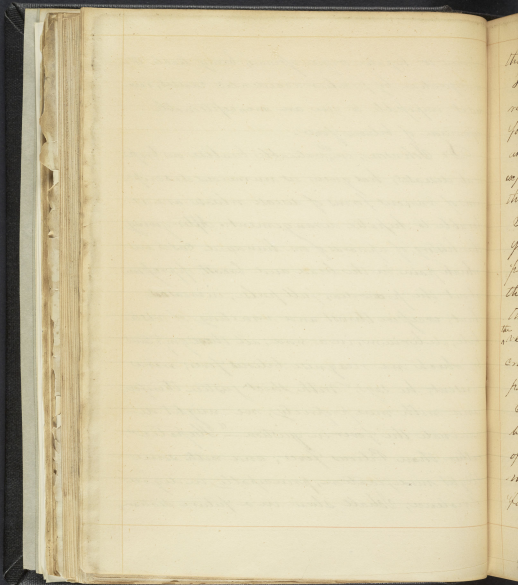
Few travellers who have visited the burning regions of the Indies, have failed to remark the ravages of this scourge of the human race. It is not, however, peculiar to these climes; the breeze of summer wafts it into the bosom of our country, and from Louisiana, far to the north, we can trace its deadly career.

The variety of forms which the disorders

re-
m
and
re-
C
ica
time
for
the
wh
ab
he
kin
by
for
an
now
rat
the
of

referred to hepatic origin of fevers, being liable to modification by peculiar accidental causes, renders it impossible to give an unexceptionable definition of bilious fever.

Dr Johnson, in ^{his} valuable treatise on tropical diseases, has given us numerous descriptions of various forms of disease which are referable to hepatic derangement. After giving the history of upwards of one hundred cases in which pain in the head and breast, oppression about the præcordia, full pulse, increased heat, excessive thirst and vanishing of viscid bile, delirium, in a word, all the ~~these~~ symptoms by which we recognise bilious fever, were present, he says, "With strict justice therefore, and with more propriety, we might designate the fever in question - "Hepatic" rather than Bilious fever; and with some slight modification, principally, in degree of violence, I shall shew in a future section,



that in nativity it is altis et edine hepatitis etc.

He arrives at this conclusion by a train of reasoning which may be condensed in the following words. The external cutaneous vessels are excited into inordinate action during exposure to the heat of the day, with which the venaportarum of the Liver sympathize.

The sudden check which these receive from the chilling air of night, arrests the perspiration and determines the blood to the interior which is impeded in its passage through the Liver, and accumulates in ^{the} venaportarum, giving rise to a vitiated secretion of bile and a pernicious sympathetic impression upon the brain.

The bile stagnating in the biliary ducts, becomes viscid; and a commencement of a hurried secretion, from emetics & other medicines, determining the blood to the surface, often so obstructs the passage to the

in
two
of
the
tent
an
"B
la
dis
an
two
for
the
m
b
me
eff
in
Con

intestines, that regurgitation into the circulation takes place, and tinges the skin yellow.

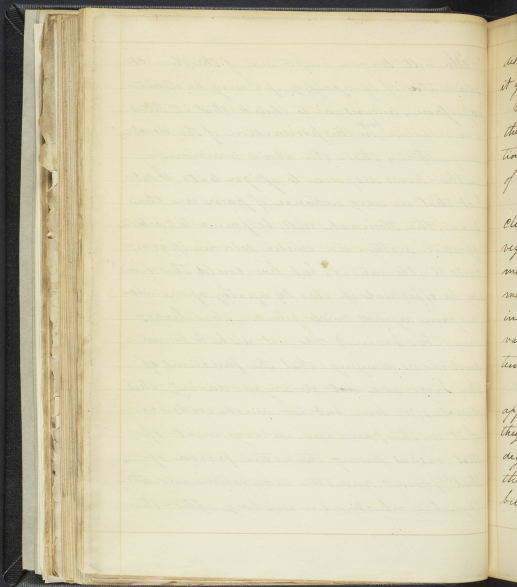
A great deal, however, is forced up through the stomach in a spasmodic and vilitated state; tending to keep up the gastric irritability, and sometimes to destroy the stomach altogether.

"This view of the subject he thinks, is calculated to explain the circumstance of this disease making its first attack at night and afterwards observing nocturnal aggravations.

It is no easy matter to determine with precision how many causes conspire to the production of bilious fever, nor upon what part of the system the primary morbid impression is made; be that as it may, we can undoubtedly trace its progress and effects by a train of sympathetic actions involving almost all the important viscera, consequently, affecting the whole system.

to
the
the
in
an
pro
he
off
far
day
the
an
an
the
the
of
the
the
the

The well known importance of the Stomach
as a centre of sympathy, if I may be allowed
^{the} expression, induces me to think that it takes
a more active ^{part} in the production of the disease
in question, than the above mentioned
author seems disposed to assign to it. I sus-
pect that in every instance of pain in the
head, the Stomach will be found to contain
offensive matter. An emetic seldom if ever,
fails to alleviate it; but how could this some-
times be effectual if the sympathy upon which
the pain depends, exists between the liver-
and the brain? I do not wish to be un-
derstood as denying that the functions of
the Liver are ~~not~~ deranged during this
disease; we have but too much evidence
of it in the pain and enlargement of
that viscus during the active period of
that "fever" and the inflammation and other
sequelæ which remain long after the

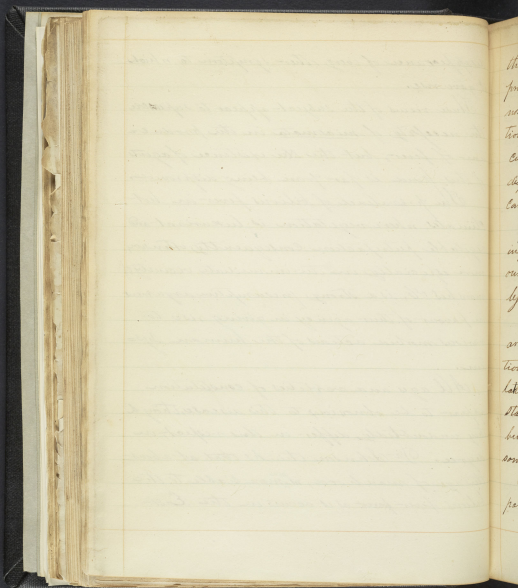


disappearance of every other symptom to which it gave rise.

These views of the subject appear to supersede the necessity of miasmata in the production of fever; but the ~~the~~ existence of agents of this kind is far from being disproved.

The prevalence of bilious fever in hot climates, where vegetation is luxuriant and vegetable putrefaction consequently attending, more especially in the immediate vicinity of marshes &c. is a strong presumptive argument in favour of their agency in giving rise to various morbid actions of the human system.

All ages and varieties of constitution appear to be obnoxious to this disease, though they undoubtedly differ in this respect, in degree. Dr Johnson thinks that at about the age of manhood, ^{we} are more liable to the bilious fever ~~than~~ as it occurs in the East.



than either before or after. It is not improbable that the reason of this is to be found, not in any peculiar liability of the constitution at that age, but rather, in the circumstance of greater exposure, and less disposition to cautionary discipline, so common to this active period of life.

The constitution indeed is at this time in full vigour, and it is not agreeable to our reason to suppose that we are then less strongly guarded by it.

The forms of disease termed bilious are modified by peculiarities of constitution and climate. More particularly ^{by} the latter, as it would appear by the circumstances of many inhabitants of our place being affected in a similar manner though somewhat differently from those of another.

Thus in the bilious fever of Bengal, the patient would be seized with delirium

in
he
Ch
es
for
no
to
a
air
vis
the
he
oth
re
he
emo
Op
lib
sp
the

in the very commencement, while in our hemisphere its attack is more gradual.

No do we frequently meet with instances in our northern climate, in which the fever hurries through the rapid career which marks the more inveterate character of the oriental disease.

In the treatment of this disease one indication presents itself at an early period, viz. to unload the stomach and intestines of their morbid contents. The pain in the head, indicative of gastric irritation, and other unpleasant symptoms are quickly relieved by an evacuation of the stomach, hence the propriety of administering an emetic at an early stage of the disease.

If the arterial action is considerable, blood letting should precede all other remedies, especially emetics, if any determination to the head is apparent. These two remedies

are particularly useful when the skin is hot and dry. They seldom fail in producing perspiration, in which the more violent and distressing symptoms are temporarily subdued. The salutary effects of Calomel upon both the Stomach and Liver, perhaps on the latter through its sympathy with the former, point it out as the most eligible cathartic. It should, however, be given with other intentions besides that of a mere evacuant. In small doses frequently repeated, it restores the tone of the Stomach and relieves the distressing pain and irritability so common in those diseases which involve the hepatic functions.

Cold bathing has been resorted to in certain stages of this disease, but its good effects appear to be so precarious and at best, so evanescent, that it will not probably

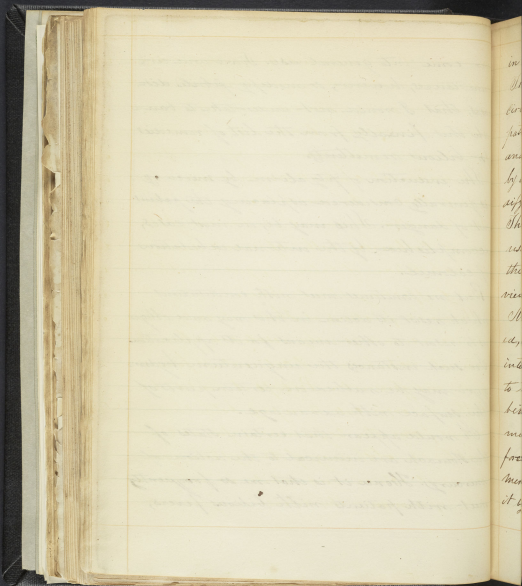
mer
sum
colla
ish
fo-
The
is g
out
acc
of
Be
wh
as to
On
ggo
the
On
the
mes
mee

ever come into general use. Time and circumstances, however, so modify febrile diseases, that I would not undertake to banish this finally from the list of remedies for bilious remittents.

The induction of ptyalism by mercury is generally considered as placing the patient out of danger. This may be, in most cases, accomplished by the internal exhibition of calomel.

But we sometimes meet with constitutions which resist its action in this way and oblige us to resort to other means for its application. In such instances the unguentum hydragyri may be rubbed on certain parts of the surface with advantage.

It would appear that certain states of the stomach are inimical to the action of mercury. Hence it is that we so frequently meet with patients with bilious fevers,



in whom it is so difficult to induce ptyalism.

The most reasonable explanation of this circumstance is to be founded upon the sympathy of the salivary glands with the stomach and the impression produced upon that organ by its ^{no} unnatural contents over-powering or modifying that of the mercury.

This is another argument in favour of the use of Cathartics, both before and during the exhibition of Calomel, given with the view of affecting the system.

Mercurial frictions, as I have already observed, are advantageously resorted to when the internal exhibition of Calomel is found to be insufficient. Perhaps it would be better in every case to employ both these means from the beginning; for we cannot forget the obstinacy of the system against mercurial action and while we are proving it by experiment the disease may be making

in
by
no
of
the
the
it
it
No
the
by
un
tion
it
in
Ca
sh
Q
Th

irreparable inroads upon the Constitution.

The methods of applying mercury externally are, the mercurial plaster and frictions with the soft ointment. Camphor and opium are sometimes combined with the latter to augment its activity.

Whatever may be our dependence upon the efficacy of the mercurial impression, it will be found necessary to attend to the state of the alimentary Canal.

Its functions are very much deranged by fever and morbid matter accumulates and becomes a continual source of irritation, protracting the disease and aggravating its symptoms. One of the best cathartics in bilious fever is a combination of Calomel Crem. Tart. and Gamboge. It should be given during the intermissions.

Diaphoretics next claim our attention.

These may be said to be important antagonists

of
and
Lo
mo
any
V
mo
at
gio
den
O
ie
Sh
than
by
The
writ
In
hu
mix

of febrile action. When the surface is hot and dry, they are particularly serviceable. In this case we will ~~range~~ blood letting with the class of remedies; it should at any rate, precede their exhibition.

Cullen was of opinion that their efficacy was dependent upon their nauseating effects, at least that they were ^{not} serviceable unless given to that extent, experience, however, has demonstrated the fallacy of this doctrine.

Among the articles of this class, the emetic tartar holds a distinguished rank.

This medicine acts in such small doses that its effects do not appear to be exclusively attributable to diaphoresis or nausea. The stomach, however, is sometimes in so irritable a state as to prevent its use.

In such cases we must resort to the saline diaphoretics, such as the effervescing mixture, &c.

7
m
fac
the
of
of
me
an
pro
of
tem
Can
Too
at
Sta
of
go

By a judicious application of the remedies which we have enumerated, we will seldom fail, under ordinary, circumstances to arrest the course of the fever.

Proper attention to cleanliness in articles of clothing bedding &c and ventilation of the apartments of the sick, if not absolutely necessary, will at least facilitate the cure and greatly contribute to the comfort of the patient.

After the completion of the cure, that is after the disappearance of every febrile symptom, the debilitated constitution frequently calls for the assistance of tonics for the restoration of its powers. They should be given at first in small doses, according to the state of the stomach, and a moderate degree of skill will be sufficient to direct the gradual enlargement of the dose.

